

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>589800004POA</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 b. low.	
International application No. <b>PCT/US 99/ 28173</b>	International filing date (day/month/year) <b>29/11/1999</b>	(Earliest) Priority Date (day/month/year) <b>30/11/1998</b>
Applicant <b>FLINT INK CORPORATION et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

**LITHOGRAPHIC PRINTING INKS COMPRISING ACID-FUNCTIONAL VINYL POLYMER AND POLYOL PHASE**

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawing to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/28173

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C09D11/02 C09D11/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C09D C08K C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 045 232 A (PARKINSON HAROLD B) 30 August 1977 (1977-08-30) cited in the application column 6, paragraph 1; claims 1,5,7	1-15
A	US 4 981 517 A (DESANTO JR RONALD F ET AL) 1 January 1991 (1991-01-01) cited in the application claim 1	1-15
A	EP 0 543 385 A (DYES JOACHIM LACKFAB GMBH) 26 May 1993 (1993-05-26) claims 1,2; examples 1-4	1-15
A	DE 41 22 990 A (HUBER FA MICHAEL MUENCHEN) 14 January 1993 (1993-01-14) column 2, line 39 - line 42; claim 4 column 2, line 5 - line 8	1-15

-/--



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

\*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

18 April 2000

Date of mailing of the International search report

02/05/2000

Name and mailing address of the ISA

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Authorized officer

Lauteschlaeger, S

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 814 136 A (WESTVACO CORP) 29 December 1997 (1997-12-29) claims 1,4 -----	1-15
A	US 3 661 619 A (SURLAND AAGE) 9 May 1972 (1972-05-09) claims 2,5 -----	1-15

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/28173

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4045232	A	30-08-1977	NONE	
US 4981517	A	01-01-1991	NONE	
EP 0543385	A	26-05-1993	DE 4138073 A AT 117350 T DE 59201232 D DK 543385 T ES 2067997 T	27-05-1993 15-02-1995 02-03-1995 06-06-1995 01-04-1995
DE 4122990	A	14-01-1993	AT 138677 T DE 59206399 D DK 523567 T EP 0523567 A ES 2089303 T	15-06-1996 04-07-1996 14-10-1996 20-01-1993 01-10-1996
EP 0814136	A	29-12-1997	US 6020401 A	01-02-2000
US 3661619	A	09-05-1972	NONE	

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>589800003POA</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. <b>PCT/US 99/ 28182</b>	International filing date (day/month/year) <b>29/11/1999</b>	(Earliest) Priority Date (day/month/year) <b>30/11/1998</b>
Applicant <b>FLINT INK CORPORATION et al.</b>		

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2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

## 4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

**PRINTING INKS COMPRISING A BRANCHED VINYL RESIN**

## 5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

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## 6. The figure of the drawings to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/28182

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C09D11/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C09D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 814 136 A (WESTVACO CORP) 29 December 1997 (1997-12-29) claims 1,3,11; examples 2,3,5	1-26
X	EP 0 662 641 A (MITSUI TOATSU CHEMICALS, INC) 12 July 1995 (1995-07-12) paragraph bridging pages 3 and 4; page 4, lines 37-41; preparation examples 1-11 page 3, line 35-38; claims 1,3	1-26
X	EP 0 732 344 A (HENKEL CORP) 18 September 1996 (1996-09-18) page 5, line 23-28; claim 1 page 9, line 40-52	1-26
	-/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

7 March 2000

Date of mailing of the international search report

24/03/2000

Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/28182

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 5 616 364 A (CLEARY BRENDA A ET AL)  1 April 1997 (1997-04-01)  column 1, line 13-17  column 8, line 49,50  column 2, line 61-64; claims 1,7,8,10,11  paragraph bridging columns 3 and 4  column 7, line 5-9; examples 1,2</p>	1-26
X	<p>US 4 518 764 A (TANAKA MOTOMU ET AL)  21 May 1985 (1985-05-21)    column 25, line 1-6; claim 1; examples  2-12</p>	1-4,7, 12-16, 19-26
X	<p>DATABASE WPI  Derwent Publications Ltd., London, GB;  AN 1994-290563'36!  XP002132409  &amp; JP 06 219058 A (GENERAL KK),  9 August 1994 (1994-08-09)  abstract</p>	1-6,23

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/28182

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0814136	A	29-12-1997	US 6020401 A	01-02-2000
EP 0662641	A	12-07-1995	DE 69420244 D	30-09-1999
			JP 8095297 A	12-04-1996
			KR 138952 B	15-06-1998
			US 5468585 A	21-11-1995
EP 0732344	A	18-09-1996	US 5554705 A	10-09-1996
US 5616364	A	01-04-1997	AU 7677394 A	10-04-1995
			CA 2171631 A	30-03-1995
			EP 0722369 A	24-07-1996
			WO 9508404 A	30-03-1995
US 4518764	A	21-05-1985	JP 1421408 C	29-01-1988
			JP 59135246 A	03-08-1984
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			FR 2535327 A	04-05-1984
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